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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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of 1 Sheet

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Application Number	09/843,545	
Filing Date	April 26, 2001	
First Named Inventor	Richard D. Harris	
Group Art Unit	2812	
Examiner Name		
Attorney Docket Number	01AB021	

				U.S. PATENT DOC	JMENTS	
Examiner Initials*	Cite No.1	U.S. Patent Number	Document Kind Code ² (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
Re		5,761,350		Koh	Jun. 2. 1998	
1.		5,783,340		Farino et al.	Jul. 21, 1998	
		5,804,314		Field et al.	Sep. 8, 1998	
		5,955,688		Aksyuk et al.	Nov. 30, 1999	
		6.046.066		Fang et al.	Apr. 4, 2000	
		6,071,426		Lee et al.	Jun. 6, 2000	
		6,100,477		Randall et al.	Aug. 8, 2000	
		6,114,794		Dhuler et al.	Sep. 5, 2000	
		6,137,206		Hill	Oct. 24, 2000	
		6,159,385		Yao et al.	Dec. 12, 2000	
		5,578,976		Yao	Nov. 26, 1996	
		5,903,380		Motamedi et al.	May 11, 1999	
1		6,232,847		Marcy, 5th et al.	May 15, 2001	
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Examiner Initials*	_	F	Foreign Patent Document			Date of Publication of	Pages, Columns, Lines,	
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Sheet 1 of 4

Ca	Complete if Known					
Application Number	09/843,545					
Filing Date	April 26, 2001					
First Named Inventor	Richard D. Harris					
Group Art Unit	2812					
Examiner Name						
Attorney Docket Number	110003.97460					
	160					

Examiner	Cite	U.S. Patent	Document Kind Code ²	Name of Patentee or Applicant	Date of Publication of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant
nitials*	No.1	Number	(if known)	of Cited Document	MM-DD-YYYY	Figures Appear
RI		5,578,976		Yao	11/26/1996	
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		5,783,340		Farino et al.	7/21/1998	
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		5,995,688		Aksyuk et al.	11/30/1999	0
\Box		6,046,066		Fang et al.	4/4/2000	P
		6,071,426		Lee et al.	6/6/2000	
		6,094,102		Chang et al.	7/25/2000	<u> </u>
		6,100,477		Randall et al.	8/8/2000	<u>-</u>
		6,114,794		Dhuler et al.	9/5/2000	-
		6,137,206		Hill	10/24/2000	F**
		6,159,385		Yao et al.	12/12/2000	
		6,188,322		Yao et al.	2/13/2001	
77		6,232,841		Bartlett et al.	5/15/2001	
		6,232,847		Marcy, 5th et al.	5/15/2001	
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	FOREIGN PATENT DOCUMENTS										
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[110003.97460]

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Attorney Docket Number	110003.97460	0,	٠,			

	OTHER PRIOR ART NON PATENT LITERATURE DOCUMENTS	<u>'U</u>			
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1	Toumazou, C. et al., n-step Charge Injection Cancellation Scheme for Very Accurate Switched Current Circuits, Electronic Letters, V.30 (9) 680-681: 1994.				
Emmerich, H., et al., A Novel Micromachined Magnetic-Field Sensor, MEMS 99 IEEE Conference, January 17-21, 1999, IEEE Catalog No. 99ch36291c.					
3	Madou, Marc, Fundamentals of Microfabrication, Chapters 2-4, CRC Press LLC, Boca Raton, FL: 1997.				
4	Kovacs, Gregory T.A., Micromachined Transducers Sourcebook, Table of Contents, pp. 77-119 and Index, WCB McGraw-Hill, U.S.A.: 1998. ✔				
5	Teegarden, Darrell et al., How to Model and Simulate Microgyroscope Systems, IEEE Spectrum, 66-75, July 1998.				
6	Emmerich, Harald et al., Magnetic Field Measurements with a Novel Surface Micromachined Magnetic-Field Sensor, IEEE Transactions on Electron Devices, V. 47 (5) 972-977, May 2000.				
7	McGruer, N.E. et al., Electrostatically Actuated Microswitches; Scaling Properties, Solid-State Sensor and Actuator Workshop, Hilton Head Island, South Carolina, June 8-11, 1998, pp.132-135.	-			
8	Miyajima, Hiroshi et al., High-Aspect-Ratio Photolithography for MEMS Applications, J. of Microelectromechanical Sys., V.4(4) 220-229, Dec. 1995.	1			
9	Lu, Crist et al., A Monolithic Surface Micromachined Accelerometer with Digital Output, IEEE J. of Solid State Circuits, V. 30 (12) 1367-1373, Dec. 1995.				
10	Chen, Ming-Jer et al., Weak Inversion Charge Injection in Analog MOS Switches, IEEE J. of Solid-State Circuits, V. 30 (5) 604-606, May 1995.				
11	Lemkin, Mark A. et al., A Fully Differential Lateral S? Accelerometer with Drift Cancellation Circuitry, Solid-State Sensor and Actuator Workshop, Hilton Head, South Carolina, June 2-6, 1996, pp. 90-93.				
	1 2 3 4 5 6 7 8 9 10	tem (book, magazine, journal, sarial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. Tournazou, C. et al., n-step Charge Injection Cancellation Scheme for Very Accurate Switched Current Circuits, Electronic Letters, V.30 (9) 680-681: 1994. Emmerich, H., et al., A Novel Micromachined Magnetic-Field Sensor, MEMS 99 IEEE Conference, January 17-21, 1999, IEEE Catalog No. 99ch36291c. Madou, Marc, Fundamentals of Microfabrication, Chapters 2-4, CRC Press LLC, Boca Raton, FL: 1997. Kovacs, Gregory T.A., Micromachined Transducers Sourcebook, Table of Contents, pp. 77-119 and Index, WCB McGraw-Hill, U.S.A.: 1998. Teegarden, Darrell et al., How to Model and Simulate Microgyroscope Systems, IEEE Spectrum, 66-75, July 1998. Emmerich, Harald et al., Magnetic Field Measurements with a Novel Surface Micromachined Magnetic-Field Sensor, IEEE Transactions on Electron Devices, V. 47 (5) 972-977, May 2000. C. McGruer, N.E. et al., Electrostatically Actuated Microswitches; Scaling Properties, Solid-State Sensor and Actuator Workshop, Hilton Head Island, South Carolina, June 8-11, 1998, pp.132-135. Miyajima, Hiroshi et al., High-Aspect-Ratio Photolithography for MEMS Applications, J. of Microelectromechanical Sys., V.4(4) 220-229, Dec. 1995. Chen, Ming-Jer et al., Weak Inversion Charge Injection in Analog MOS Switches, IEEE J. of Solid-State Circuits, V. 30 (5) 604-606, May 1995.			

				
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Complete if Known Substitute for form 1449B/PTO 09/843,545 **Application Number** INFORMATION DISCLOSURE April 26, 2001 **Filing Date** Richard D. Harris STATEMENT BY APPLICANT First Named Inventor 2812 Group Art Unit

Examiner Name (use as many sheets as necessary) of 4 Attorney Docket Number 110003.97460 Sheet 3

	- ·	OTHER PRIOR ART NON PATENT LITERATURE DOCUMENTS					
Examiner Initials	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s). To publisher, city and/or country where published.					
AL 12		Boser, Bernhard E. et al., Surface Micromachined Accelerometers, IEEE J. of Solid-State Circuits, V. 31 (3) 366-375, March 1996.					
	13	Fedder, Gary K. et al., Multimode Digital Control of a Suspended Polysilicon Microstructure, J. of Microelectromechanical Sys., V. 5 (4) 283-297, Dec. 1996.					
	14	Noriega, Gerardo, Sigma-Delta A/D Converters-Audio and Medium Bandwidths, Technical Notes-DT3 from RMS Instruments website: www.rmsinst.com, 6 pages, February 1996.					
	15	Internet page: Decimator Filter DLL, NeuroDimension Inc.: www.nd.com , May 31, 2001.					

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 4 of 4

Complete if Known						
Application Number	09/843,545					
Filing Date	April 26, 2001					
First Named Inventor	Richard D. Hadis					
Group Art Unit	2812					
Examiner Name	200					
Attorney Docket Number	110003.97460					

		OTHER PRIOR ART NON PATENT LITERATURE DOCUMENTS		
Examiner Initials	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.		T ²
Fil	1	U.S. Patent Application No.: 09/406,654, filed on September 27,1999.		
	2	U.S. Patent Application No.: 09/400,125, filed on September 21,1999.		
	3	U.S. Patent Application No.: 09/406,509, filed on September 28,1999.	***************************************	
	4	U.S. Patent Application No.: 09/955,493, filed on September 18,2001.		
	5	U. S. Patent Application No.: 09/955,494, filed on September 18, 2001.	<u> </u>	
	6	U.S. Patent Application No.: 09/675,861, filed on September 29, 2000.		
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Application Number	09/843,545	()
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First Named Inventor	Richard D. Harris	
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Examiner Name		
Attorney Docket Number	01AB021	2

				U.S. PATENT DOC	JMENTS	
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72		3,886,447		Tanaka	05-27-1975	
		4,560,953		Bozio	12-24-1985	
		5,012,207		Edwards	4-30-1991	
		5,025,346		Tang, et al.	06-18-1991	
		5,194,819		Briefer	03-16-1993	
		5,243,861		Kloeck, et al.	09-14-1993	
		5,343,157		Deschamps	08-30-1994	
	_	5,359,893		Dunn	11-01-1994	
		5,413,668		Aslam, et al.	05-09-1995	
		5,417,312		Tsuchitani, et al.	05-23-1995	
		5,424,650		Frick	06-13-1995	
		5,536,988		Zhang, et al.	07-16-1996	
		5,563,343		Shaw, et al.	10-08-1996	
		5,572,057		Yamamoto, et al.	11-05-1996	
		5,585,311		Ко	12-17-1996	
		5,600,190		Zettler	02-04-1997	
		5,646,432		lwaki, et al.	07-08-1997	
		5,658,698		Yagi, et al.	08-19-1997	
		5,798,283		Montague, et al.	08-25-1998	
		5,815,051		Hamasaki, et al.	09-29-1998	

	FOREIGN PATENT DOCUMENTS								
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RZ		5,877,038		Coldren, et al.	03-02-1999	
~		5,920,978		Koshikawa, et al.	07-13-1999	
		5,943,155		Goossen	08-24-1999	
		5,959,516		Chang, et al.	09-28-1999	
		5,995,688		Aksyuk, et al.	11-30-1999	
		6,060,336		Wan	05-09-2000	
		6,094,102		Chang, et al.	07-25-2000	
		6,116,756		Peeters, et al.	09-12-2000	
		6,144,545		Lee, et al.	11-07-2000	
		6,149,190		Galvin, et al.	11-21-2000	
	·	6,170,332		MacDonald, et al.	01-09-2001	
		6,232,150		Lin, et al.	05-15-2001	
		6,257,705		Silverbrook	07-10-2001	
		6,265,238		Yaji, et al.	07-24-2001	
		6,307,169		Sun, et al.	10-23-2001	
		6,316,278		Jacobsen, et al.	11-13-2001	
		6,356,378		Huibers	03-12-2002	
		6,356,689		Greywall	03-12-2002	
		6,373,682		Goodwin-Johansson	04-16-2002	
		6,384,353		Huang, et al.	05-07-2002	

				FORE	IGN PATENT DOCUMEN	TS		
	C 4-	F	oreign Patent Do	cument	Name of Patentee or	Date of Publication of	Pages, Columns, Lines, Where Relevant	
Examiner Initials	Cite No.1	Office ³	Number ⁴	Kind Code ⁵ (<i>if known</i>)	Applicant of Cited Document	Cited Document MM-DD-YYYY	Passages or Relevant Figures Appear	Tf
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Sheet 3 of 4

Co	omplete if Known	
Application Number	09/843,545	
Filing Date	April 26, 2001	
First Named Inventor	Richard D. Harris	
Group Art Unit	2812	
Examiner Name		
Attorney Docket Number	110003.97460	

			_	U.S. PATENT DOCL	JMENTS	
Examiner Initials	Cite No. ¹	Number	Coument Kind Code ² (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
7.2		6,391,742		Kawai	05-21-2002	
	· · ·	6,400,009		Bishop, et al.	06-04-2002	
		5,491,604		Nguyen, et al.	02-13-1996	
		5,834,864		Hesterman, et al.	11-10-1998	
		5,955,932		Nguyen, et al.	09-21-1999	
		6,127,767		Lee, et al.	10-03-2000	
		6,188,322		Yao, et al.	02-13-2001	
\Box		6,236,281		Nguyen, et al.	05-22-2001	
		6,411,214		Yao, et al.	06-25-2002	·
		6,417,743		Mihailovich, et al.	07-09-2002	
		6,463,339		Vasko	10-08-2002	
		6,465,929		Levitan, et al.	10-15-2002	
		6,466,005		Yao, et al.	10-15-2002	
		6,497,141		Turner, et al.	12-24-2002	
		6,504,356		Yao, et al.	01-07-2003	
The		2002/00171	32	McNie, et al.	02-14-2002	

		-		FOR	EIGN PATENT DOCUMEN	TS		
Examiner Initials*	Cite No.1	Office	Foreign Patent Do Number ⁴	Coment Kind Code ⁵ (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear) T
KI		EΡ	0 665 590	A2	Canon KK	08-02-1995		
		EP	0 711 029	A2	Canon KK	05-08-1996		
		ĒΡ	0 763 844	A2	Canon KK	03-19-1997		$oxed{\bot}$
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Substitu	ute for form 14	MOR/PTO		Co	omplete if Known	
				Application Number	09/843,545	
INF	ORMA	TION D	ISCLOSURE	Filing Date	April 26, 2001	
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heet	Δ	of	4	Attorney Docket Number	110003.97460	

		OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS	
Examiner Initials	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	Τ2
R		Storment, C.W., et al. "Flexible, Dry-Released Process for Aluminum Electrostatic Actuators." Journal of Microelectromechanical Systems, 3(3), September 1994, p 90-96.	
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